

What is claimed is:

1. A method for controlling a dehydration speed of a washing machine, comprising the steps of:

5        setting the dehydration speed on the basis of an amount of laundry put into the washing machine; and

          controlling a rotation speed of a motor of the washing machine on the basis of the set dehydration speed.

10        2. The method of claim 1, wherein the step for controlling the rotation speed of the motor comprises the steps of:

          changing a number of poles of the motor of the washing machine; and

          controlling a voltage applied to the motor when the number of the poles is changed.

15        3. The method of claim 1, wherein the motor is an induction motor.

          4. The method of claim 1, wherein the washing machine is a drum washing machine.

20        5. The method of claim 1, wherein the step for changing the number of the poles of the motor changes the number of the poles into 4 or 8.

          6. The method of claim 1, wherein the step for changing the number of  
25        the poles of the motor comprises the steps of:

sensing a dehydration speed selected by the user; and  
changing the number of the poles of the motor on the basis of the sensed dehydration speed.

5           7. The method of claim 1, wherein the step for controlling the voltage applied to the motor comprises a step for controlling the dehydration speed of the washing machine, by controlling the voltage applied to the motor by changing a phase of the voltage when the number of the poles of the motor is changed.

10           8. The method of claim 1, wherein the step for setting the dehydration speed on the basis of the sensed amount of the laundry converts the dehydration speed on the basis of the sensed amount of the laundry.

15           9. The method of claim 1, wherein the step for controlling the rotation speed of the motor of the washing machine on the basis of the set dehydration speed controls the dehydration speed by changing the number of the poles of the motor and controlling the phase of the voltage inputted to the motor.

20           10. The method of claim 2, wherein the step for controlling the voltage applied to the motor when the number of the poles is changed controls the phase of the voltage applied to the motor.

25           11. A method for controlling a dehydration speed of a drum washing machine comprising the steps of:  
sensing a dehydration speed desired by a user;

changing the number of poles of an induction motor by the sensed dehydration speed; and

changing a dehydration speed through a phase control of an induction motor according to the changed number of poles.

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12. The method of claim 11, wherein the number of poles of the induction motor is changed into 4 poles or 8 poles.

13. The method of claim 11, wherein the step for changing a dehydration  
10 speed through a phase control of the induction motor comprises the step for  
varying a voltage according to a sensed fire angle and supplying the voltage to the  
induction motor.

14. A method for controlling a dehydration speed of a drum washing  
15 machine comprising the steps of:

sensing the amount and the quality of the laundry;

determining a dehydration speed according to the sensed data;

changing the number of poles of an induction motor according to the  
determined dehydration speed; and

20 changing the dehydration speed through a phase control of a voltage that  
is inputted to the induction motor according to the changed number of poles.

15. The method of claim 14, wherein the number of poles of the  
induction motor is changed into 4 poles or 8 poles.

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16. The method of claim 14, wherein the step for varying a dehydration speed through a phase control of the voltage comprises the steps of:

sensing a fire angle corresponding to the dehydration speed; and

varying a voltage that is inputted to the induction motor according to the

5 sensed fire angle.